

Physical Health

Substandard or low-quality housing can contribute negatively to a person's physical well-being. Rates of children with asthma and bronchitis are highest for those living in substandard homes with mold, allergens, secondhand tobacco smoke, pest infestations and other indoor air pollutants (Mueller & Tighe, 2007; U.S. Department of Housing and Urban Development, 2014a). Approximately 30% of all asthma cases are caused by environmental factors, rather than genetic inheritance, suggesting that substandard housing conditions are a contributing factor. Older homes, in particular, tend to provide ideal conditions for cockroach breeding grounds and other asthma triggers (Chenoweth, Estes, & Lee, 2009; Jones-Rounds, Evans, & Braubach, 2014; U.S. Department of Housing and Urban Development, 2014a).

Lead poisoning is another major concern for those living in substandard quality housing (Bratt, 2002). There are an estimated 14 million children between the ages of 0 and 6 that live in housing constructed prior to 1960, a category of housing containing more lead-based paint than any other vintage (Mueller & Tighe, 2007). If lead enters the bloodstream, it can cause physical and intellectual impairments, such as lower intelligence, reduced physical stature, impaired hearing, and behavioral problems (Chenoweth et al., 2009; Jones-Rounds et al., 2014). Lead exposure to a developing child can cause brain, kidney, nerve, and blood damage; as well as compromised cognitive and socioemotional development (U.S. Department of Housing and Urban Development, 2014a). Lead poisoning disproportionately affects low-income minorities living in substandard housing (Chenoweth et al., 2009).

The risk of injury is also higher in a substandard home due to the presence of fire hazards, carbon monoxide, radon, poor lighting, and cluttered floors, among other factors (Jones-Rounds et al., 2014; U.S. Department of Housing and Urban Development, 2014b). Chenoweth, Estes, and Lee (2009) found that children in poor-quality housing are more susceptible to head injuries, which can lead to cerebral palsy and mental retardation. Fire hazards exist more in substandard housing where there are defective heating systems and electrical wiring that does not meet standard code requirements; therefore, burns and burn-related morbidity from fires are more likely to occur in substandard housing conditions (Chenoweth et al., 2009). Some studies have found that children are more likely to be exposed to dangerous chemicals and unsafe drinking water while living in substandard housing (Environmental Protection Agency, 2003; Faber & Krieg, 2002; Schettler, Stein, Reich, Velenti, & Wallinga, 2000). Jones-Rounds et al. (2014) found that people living in poor-quality housing were also more likely to develop lung cancer from exposure to asbestos and cardiovascular disease from poor thermal conditions in the home.

Mental Health

The home should provide a space for personal respite, however poor-quality housing is often a stressful setting rather than a restorative one (Jones-Rounds et al., 2014). Jones-Rounds, Evans and Braubach (2014) found that psychological well-being correlated with housing quality. People in high-quality housing were found to be less depressed, and more energetic, lively, and peaceful than those living in low-quality housing (Jones-Rounds et al., 2014). Substandard housing can be a source of psychological detriment, causing stress and low self-esteem, and hindering family self-sufficiency (Mueller & Tighe, 2007). Residents of low-quality housing may worry about the integrity of the home's structural components. Renters may be concerned that they have no control

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over maintenance and management practices. Stress can build as they wait on their landlords for repairs (Mueller & Tighe, 2007). Householder stress over housing quality can be transferred to children through the child's perceptiveness to psychological distress (U.S. Department of Housing and Urban Development, 2014a). Further, many substandard homes are located in high-crime areas, causing the inhabitants stress and anxiety over safety. Housing-related stress or anxiety can eventually lead to depression and stress-related mental illness (Mueller & Tighe, 2007).

Overcrowded homes are another housing-related source of stress, particularly for children when safe play areas are unavailable (Evans, Wells, Chan, & Saltzman, 2000; Mueller & Tighe, 2007; U.S. Department of Housing and Urban Development, 2014b). Overcrowding has the potential to negatively impact a child's development from lack of privacy, lack of control, and overstimulation. Overcrowding can also increase the rate of transmission of infectious diseases (U.S. Department of Housing and Urban Development, 2014a).

References

- Bratt, R. G. (2002). Housing and Family Well-being. *Housing Studies*, *17*(1), 13-26. doi: 10.1080/0267303012010585
- Chenoweth, D., Estes, C., & Lee, C. (2009). The Economic Cost of Environmental Factors Among North Carolina Children Living in Substandard Housing. *American Journal of Public Health*, 99(3), 666-674. doi: 10.2105/AJPH.2008
- Environmental Protection Agency. (2003). America's Children and the Environment: Measures of Contaminants, Body Burdens, and Illnesses. Washington, DC.
- Evans, G. W., Wells, N. M., Chan, H.-Y. E., & Saltzman, H. (2000). Housing quality and mental health. *Journal of Consulting and Clinical Psychology*, 68(3), 526-530. doi: 10.1037//0022-006x.68.3.526
- Faber, D. R., & Krieg, E. J. (2002). Unequal exposure to ecological hazards: environmental injustices in the commonwealth of Massachusetts. *Environ Health Perspect*, 110(2), 277-288.
- Jones-Rounds, M. L., Evans, G. W., & Braubach, M. (2014). The interactive effects of housing and neighbourhood quality on psychological well-being. *J Epidemiol Community Health*, 68(2), 171-175. doi: 10.1136/jech-2013-202431
- Mueller, E. J., & Tighe, J. R. (2007). Making the Case for Affordable Housing: Connecting Housing with Health and Education Outcomes. *Journal of Planning Literature*, 21(4), 371-385. doi: 10.1177/0885412207299653
- Schettler, T., Stein, J., Reich, F., Velenti, M., & Wallinga, D. (2000). In Harm's Way: Toxic Threats to Child Development. Boston, MA: Greater Boston Physicians for Social Responsibility.
- U.S. Department of Housing and Urban Development. (2014a). Housing's and Neighborhoods' Role in Shaping Children's Future. *Evidence Matters Newsletter: Transforming Knowledge Into Housing and Community Development Policy*.
- U.S. Department of Housing and Urban Development. (2014b). Protecting Children From Unhealthy Homes and Housing Instability. *Evidence Matters Newsletter: Transforming Knowledge Into Housing and Community Development Policy*.